(FILE 'HOME' ENTERED AT 15:01:19 ON 26 OCT 2003)

```
FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA'
ENTERED AT
  15:01:49 ON 26 OCT 2003
     59314 S VANCOMYCIN
L1
L2
     11148 S THIOESTER
L3
       8 S L1 (P) L2
```

4 DUPLICATE REMOVE L3 (4 DUPLICATES REMOVED) L4

208123 S BACTERIA? (P) DISEASE L5

L6 0 S L4 (P) L5 L7 945 S L1 (P) L5

L8 1668953 S IN VIVO

L9 1 S L4 (P) L8

L10 32 S MU YONGQI/AU

L11 1 S L10 AND L4

L12 0 S L11 NOT L9 L13 5 S L10 AND L1

L14 5 DUPLICATE REMOVE L13 (0 DUPLICATES REMOVED)

L15 4 S L14 NOT (L9 OR L4)

 $=> \log y$

Type	rype L#	Hits	Search Text	DBs	Com Error Time Stamp ment Definiti	Com	Com Error ment Definiti	Eri
						S	uo	5
BRS L1	L	7	mu adj yongqi.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/10/26 13:25			0
BRS	L3	9174	thioester	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/10/26 13:26			0
BRS	7]		2 same 3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/10/26 13:26			0
BRS L2		73	A82846B or chloroorienticin USPAT; US-PGPUB; or I Y264826	USPAT; US-PGPUB; EPO: IPO: DERWENT	2003/10/26 13·28			0

NO cyds fit the claimed steen KAM 09/847,048 STR parent cpd => d que 127 L13 N 23 30 Me 28 HO 1 CH2 0 OH 31 8 C 12 OH 32 29 Me 0 C OH 33 34 35 0. 17 ¹⁸ 19 0 36 22 C 21 C 20 ring N 37 C N 40 39 NODE ATTRIBUTES: CONNECT IS M2 RC AT 23 CONNECT IS E2 RC AT 25 DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED **GRAPH ATTRIBUTES:** RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 38 STEREO ATTRIBUTES: NONE 65 SEA FILE=BEILSTEIN SSS FUL L13 65 Cp 15 L25 STR Subsof STR cpd must have this moiety REP G1=(0-1) 9 VAR G2=AK/CB/HY NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED **GRAPH ATTRIBUTES:** RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS STEREO ATTRIBUTES: NONE

O SEA FILE=BEILSTEIN SUB=L25 SSS FUL L26

L27

no cpds

=> d que 128 3000 SEA FILE=REGISTRY ABB=ON PLU=ON 23290.1.1/RID AND 46.157.1/R 517 SEA FILE=REGISTRY ABB=ON PLU=ON L11 AND S/ELS L16 parent 30 Me 28 HO $\begin{array}{cccc} 1 & C \\ C & 2 & C \end{array}$ 0 OH 31 35 0. 17 ¹⁸ 19 0 36 22 C 21 C 20 41 N 37 C N 39 40 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED **GRAPH ATTRIBUTES:** RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 35 STEREO ATTRIBUTES: NONE L19 377 SEA FILE=REGISTRY SUB=L12 SSS FUL L16 L21 5 ub set 157

NODE ATTRIBUTES: CONNECT IS E2 RC AT 1 DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 3

STR 2nd subset - further refinement

must be in still some where

N G1 G2 S C G2 C · O 1 2 3 4 5 6 @9 10

REP G1=(0-1) 9 VAR G2=AK/CB/HY NODE ATTRIBUTES: KAM 09/847,048

DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

L28 O SEA FILE=REGISTRY SUB=L23 SSS FUL L26

us cyds

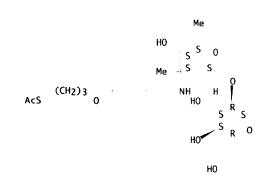
KAM 09/847,048

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9 roup but don't
fit the claimed 30 Me 28 HO. 0 OH 31 0 4 8 C 12, OH 32 35 0. 17 ¹⁸ 19 .0 36 22 ^C 21 ^C20 41_{N.} 37 C: N 38 572 40 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 35 STEREO ATTRIBUTES: NONE 377 SEA FILE=REGISTRY SUB=L12 SSS FUL L16 STR L19 L21 0 NODE ATTRIBUTES: CONNECT IS E2 RC AT DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS STEREO ATTRIBUTES: NONE UTES: NONE
45 SEA FILE=REGISTRY SUB=L19 SSS FUL L21
3 SEA FILE=CAPLUS ABB=ON PLU=ON L23
3 C+O S 45 SEA FILE=REGISTRY SUB=L19 SSS FUL L21 L23 L24

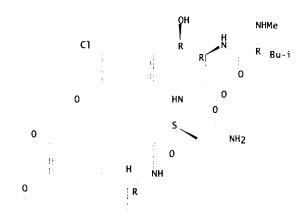
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L24 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:
                            2001:689112 CAPLUS
DOCUMENT NUMBER:
                            136:70060
TITLE:
                            Synthesis and biological evaluation of vancomycin
                            dimers with potent activity against
                            vancomycin-resistant bacteria: target-accelerated
                            combinatorial synthesis
AUTHOR(S):
                            Nicolaou, K. C.; Hughes, Robert; Cho, Suk Young;
                            Winssinger, Nicolas; Labischinski, Harald; Endermann,
                            Rainer
CORPORATE SOURCE:
                            Department of Chemistry and The Skaggs Institute for
                            Chemical Biology, The Scripps Research Institute, La
Jolla, CA, 92037, USA
                            Chemistry--A European Journal (2001), 7(17), 3824-3843
SOURCE:
                            CODEN: CEUJED; ISSN: 0947-6539
PUBLISHER:
                            Wiley-VCH Verlag GmbH
DOCUMENT TYPE:
                            Journal
LANGUAGE:
                            English
     Based on the notion that dimerization and/or variation of amino acid 1 of
     vancomycin could potentially enhance biol. activity, a series of synthetic
     and chem. biol. studies were undertaken in order to discover potent
     antibacterial agents. We describe two ligation methods (disulfide
     formation and olefin metathesis) for dimerizing vancomycin derivs. and applications of target-accelerated combinatorial synthesis (e.g.,
     combinatorial synthesis in the presence of vancomycin's target
     Ac2-L-Lys-D-Ala-D-Ala) to generate libraries of vancomycin dimers.

Screening of these compd. libraries led to the identification of a no. of
     highly potent antibiotics effective against vancomycin-susceptible,
     vancomycin-intermediate resistant and, most significantly,
     vancomycin-resistant bacteria.
     321362-17-8 383183-30-0 383183-31-1
383183-32-2 383183-33-3 383183-34-4
     383183-35-5 383183-36-6 383183-37-7
     383183-38-8 383183-39-9 383183-40-2
     383183-41-3 383183-42-4 383183-43-5
     383183-44-6 383183-45-7 383183-46-8
     383183-71-9 383183-72-0 383183-73-1
     383183-74-2 383183-75-3 383183-76-4
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     383183-80-0 383183-81-1 383183-82-2
383184-95-0 383184-97-2 383184-99-4
     383185-04-4 383185-06-6 383185-07-7
     383185-09-9 383185-11-3 383185-12-4
     383185-32-8
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (synthesis and biol. evaluation of vancomycin dimers with potent
         activity against vancomycin-resistant bacteria, including
         target-accelerated combinatorial synthesis)
     321362-17-8 CAPLUS
Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]- (9CI) (CA
     INDEX NAME)
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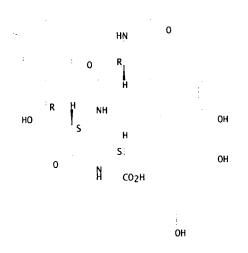


PAGE 1-B



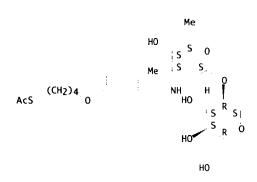
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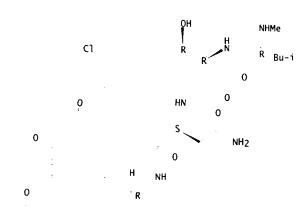
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RN 383183-30-0 CAPLUS
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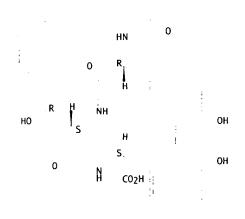
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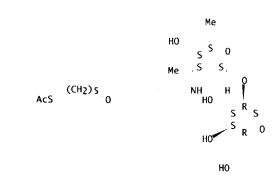
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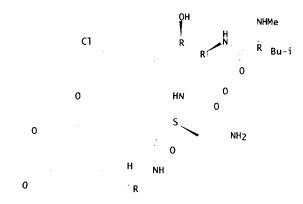


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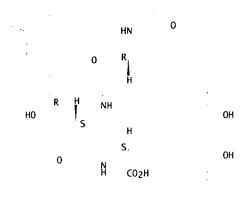
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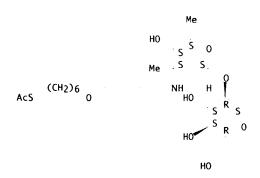
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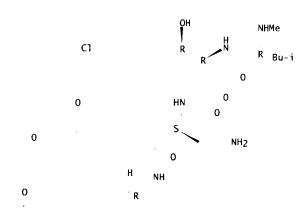


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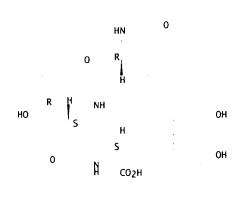
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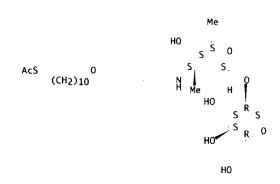
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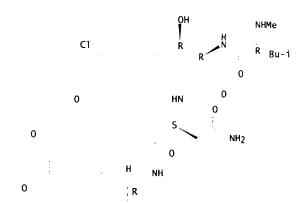


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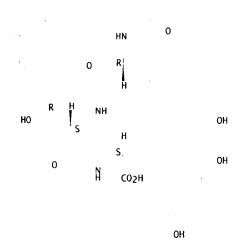


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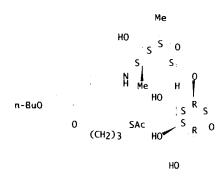
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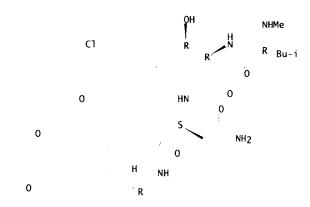
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(CA INDEX NAME)

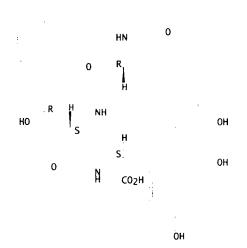
Absolute stereochemistry.

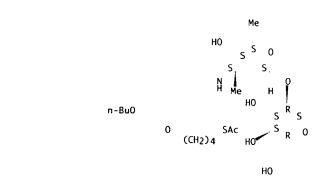




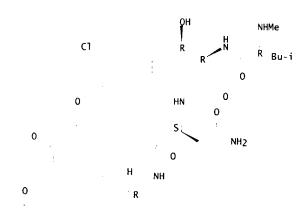
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PAGE 2-B

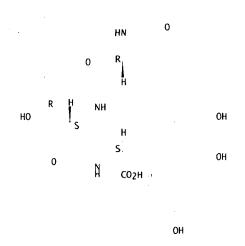




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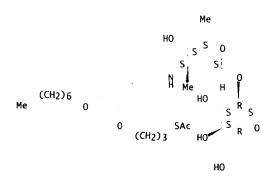


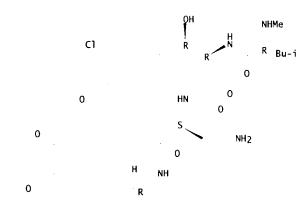
PAGE 2-A C1 PAGE 2-B



RN 383183-36-6 CAPLUS
CN Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]-4-(heptyloxy)phenyl]methyl](9CI) (CA INDEX NAME)

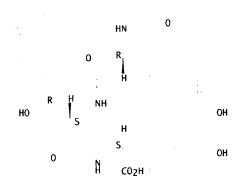
Absolute stereochemistry.





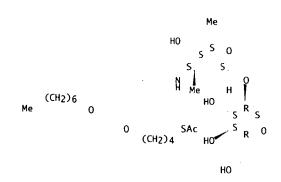
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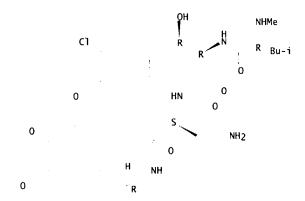


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RN 383183-37-7 CAPLUS
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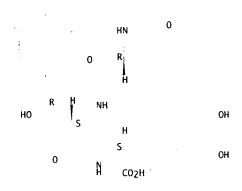


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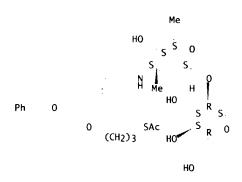
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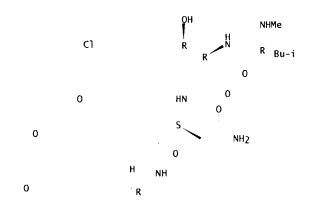


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RN 383183-38-8 CAPLUS
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Absolute stereochemistry.

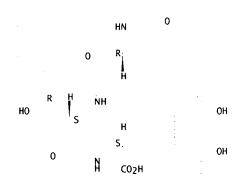




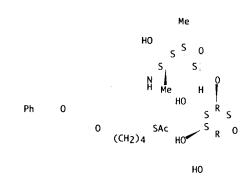
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C1

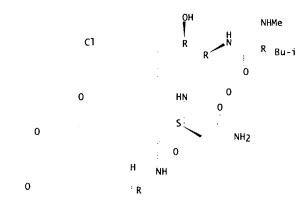
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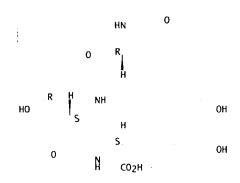
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KAM 09/847,048

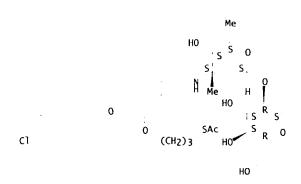
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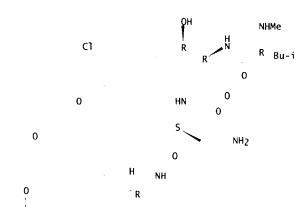


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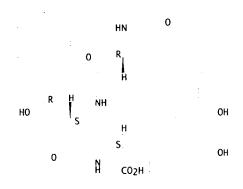
Absolute stereochemistry.



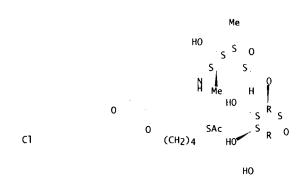


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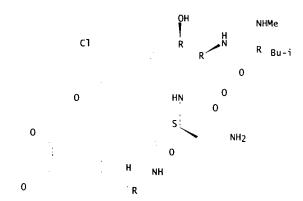
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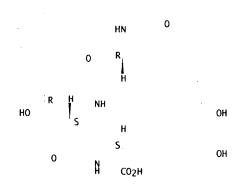


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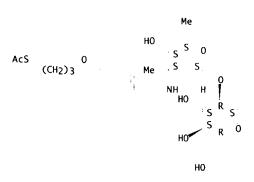
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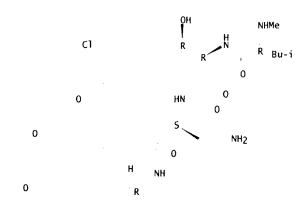
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RN 383183-42-4 CAPLUS
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Absolute stereochemistry.

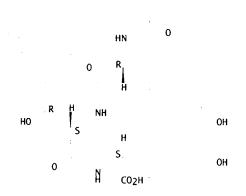


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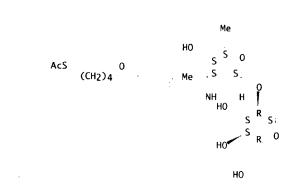
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PAGE 2-B

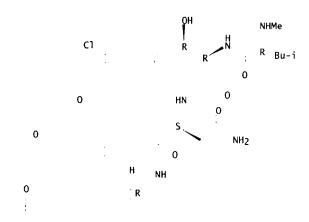


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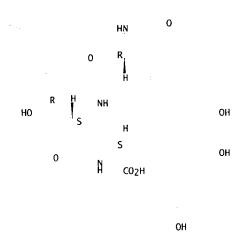
RN 383183-43-5 CAPLUS
CN Vancomycin, N3''-[[4-[4-(acetylthio)butoxy]phenyl]methyl]- (9CI) (CA INDEX NAME)



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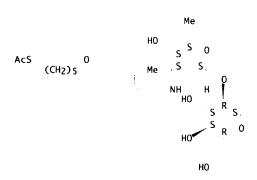


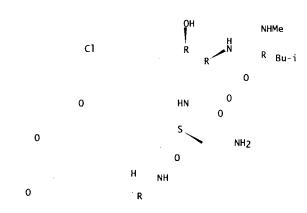
PAGE 2-A C1 PAGE 2-B



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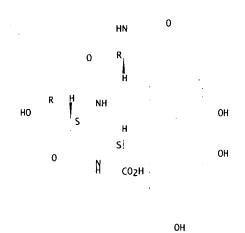
Absolute stereochemistry.



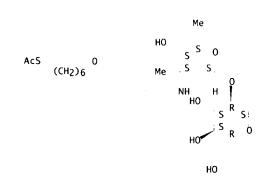


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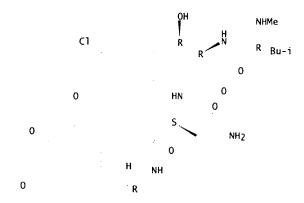
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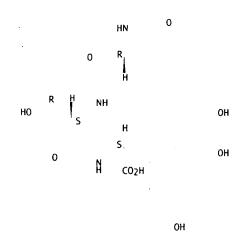


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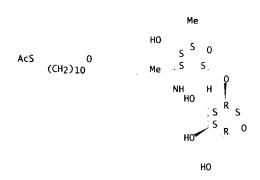
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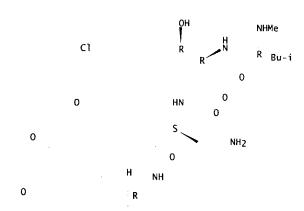
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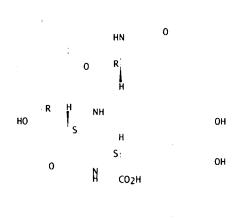
Absolute stereochemistry.





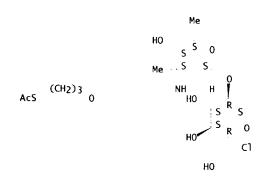
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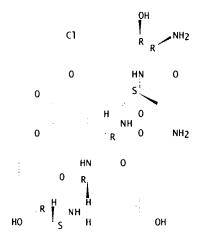


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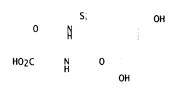
RN 383183-71-9 CAPLUS
CN Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]-28[[(carboxymethyl)amino]carbonyl]-28-decarboxy-49-de[4-methyl-2(methylamino)-1-oxopentyl]- (9CI) (CA INDEX NAME)

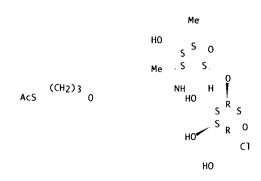


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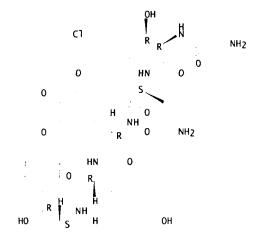


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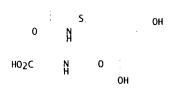




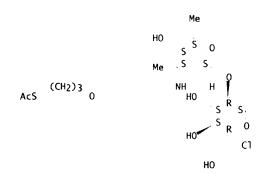
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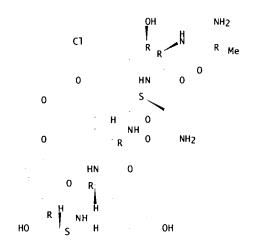
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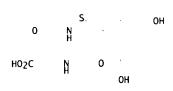
383183-73-1 CAPLUS Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]-49-[(2R)-2-amino-1-oxopropyl]-28-[[(carboxymethyl)amino]carbonyl]-28-decarboxy-49-de[4-methyl-2-(methylamino)-1-oxopentyl]- (9CI) (CA INDEX NAME) RN CN



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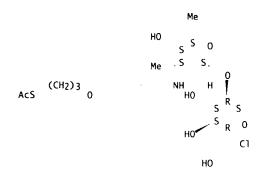


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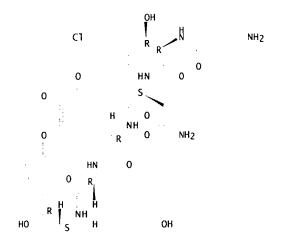


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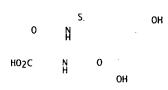
383183-74-2 CAPLUS Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]-49-(3-amino-1-oxopropyl)-28-[[(carboxymethyl)amino]carbonyl]-28-decarboxy-49-de[4-methyl-2-(methylamino)-1-oxopentyl]- (9CI) (CA INDEX NAME)



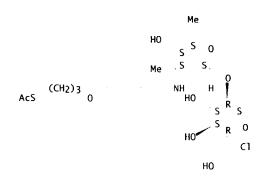
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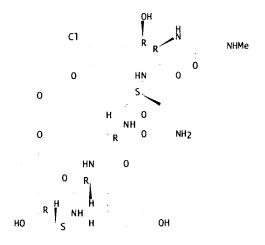
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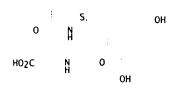
383183-75-3 CAPLUS
Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]-28[[(carboxymethyl)amino]carbonyl]-28-decarboxy-49-de[4-methyl-2(methylamino)-1-oxopentyl]-49-[(methylamino)acetyl]- (9CI) (CA INDEX NAME)



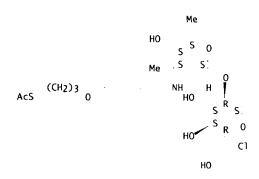
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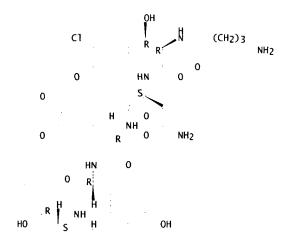
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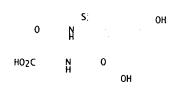
383183-76-4 CAPLUS Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]-49-(4-amino-1-oxobutyl)-28-[[(carboxymethyl)amino]carbonyl]-28-decarboxy-49-de[4-methyl-2-(methylamino)-1-oxopentyl]- (9CI) (CA INDEX NAME)



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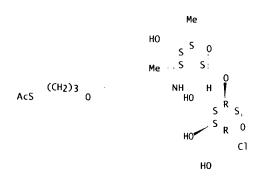


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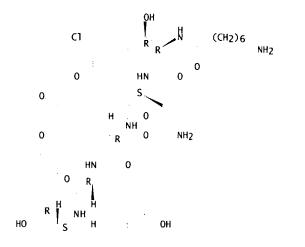


383183-77-5 CAPLUS

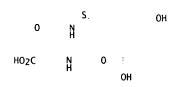
Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]-49-(7-amino-1-oxoheptyl)-28-[[(carboxymethyl)amino]carbonyl]-28-decarboxy-49-de[4-methyl-2-(methylamino)-1-oxopentyl]- (9CI) (CA INDEX NAME)



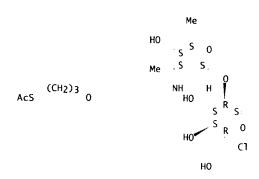
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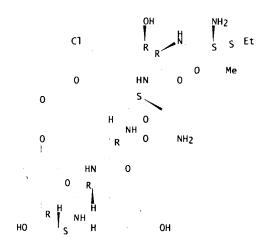
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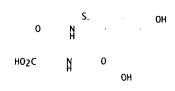
383183-78-6 CAPLUS Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]-49-[(25,35)-2-amino-3-methyl-1-oxopentyl]-28-[[(carboxymethyl)amino]carbonyl]-28-decarboxy-49-de[4-methyl-2-(methylamino)-1-oxopentyl]- (9CI) (CA INDEX NAME)



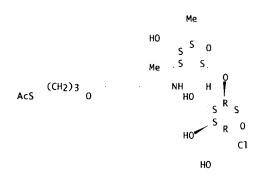
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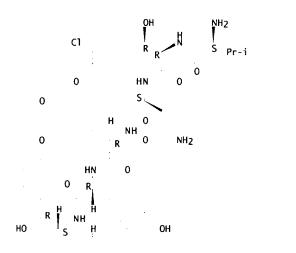
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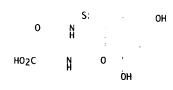
383183-79-7 CAPLUS
Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]-49-[(2S)-2-amino-3-methyl-1-oxobutyl]-28-[[(carboxymethyl)amino]carbonyl]-28-decarboxy-49-de[4-methyl-2-(methylamino)-1-oxopentyl]- (9CI) (CA INDEX



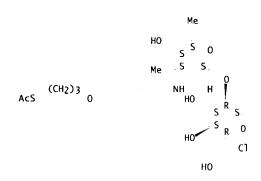
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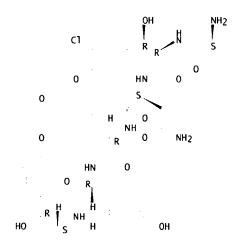
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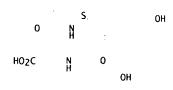
383183-80-0 CAPLUS Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]-49-[(2S)-2-amino-3-cyclohexyl-1-oxopropyl]-28-[[(carboxymethyl)amino]carbonyl]-28-decarboxy-49-de[4-methyl-2-(methylamino)-1-oxopentyl]- (9CI) (CA INDEX



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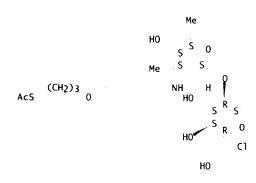


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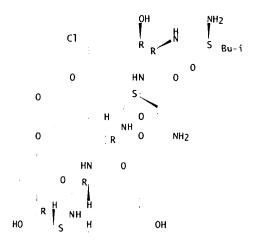


383183-81-1 CAPLUS

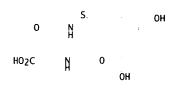
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(CA INDEX NAME)



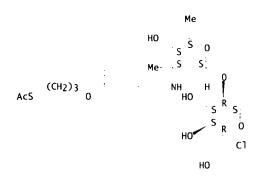
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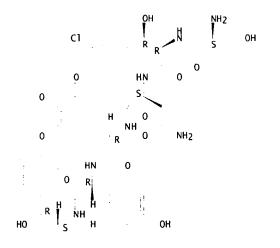
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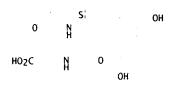
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Vancomycin, N3''-[[3-[3-(acety]thio)propoxy]phenyl]methyl]-49-[(25)-2-amino-3-hydroxy-1-oxopropyl]-28-[[(carboxymethyl)amino]carbonyl]-28-decarboxy-49-de[4-methyl-2-(methylamino)-1-oxopentyl]- (9CI) (CA INDEX



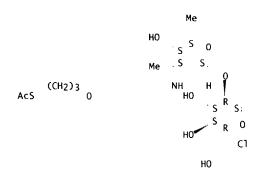
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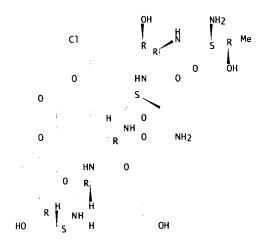
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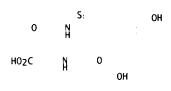
383184-95-0 CAPLUS Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]-49-[(2S,3R)-2-amino-3-hydroxy-1-oxobutyl]-26-[[(carboxymethyl)amino]carbonyl]-26-decarboxy-49-de[4-methyl-2-(methylamino)-1-oxopentyl]- (9CI) (CA INDEX NAME)



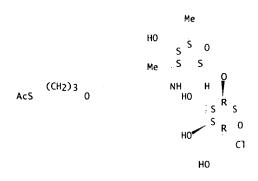
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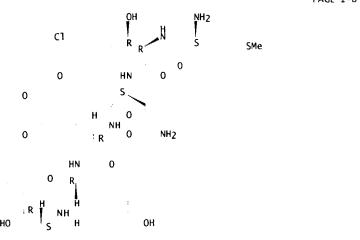
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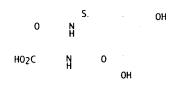
383184-97-2 CAPLUS Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]-49-[(2S)-2-amino-4-(methylthio)-1-oxobutyl]-26-[[(carboxymethyl)amino]carbonyl]-26-decarboxy-49-de[4-methyl-2-(methylamino)-1-oxopentyl]- (9CI) (CA INDEX



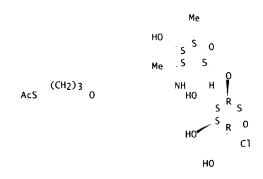
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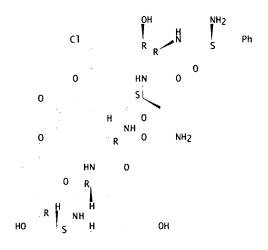
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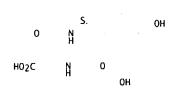
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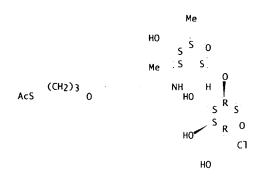
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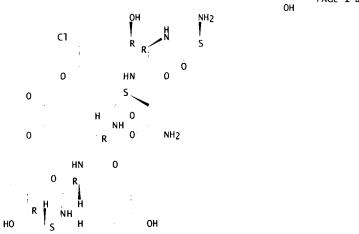
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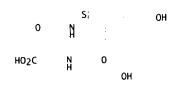
383185-04-4 CAPLUS Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]-49-[(2S)-2-amino-3-(4-hydroxyphenyl)-1-oxopropyl]-26-[[(carboxymethyl)amino]carbonyl]-26-decarboxy-49-de[4-methyl-2-(methylamino)-1-oxopentyl]- (9CI) (CA INDEX



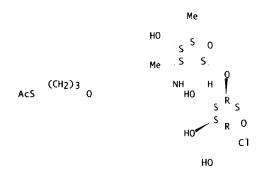
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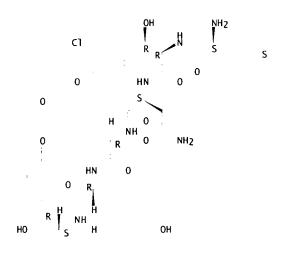
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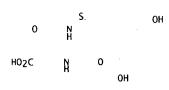
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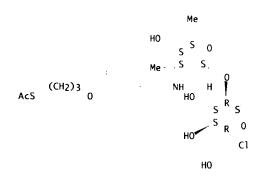
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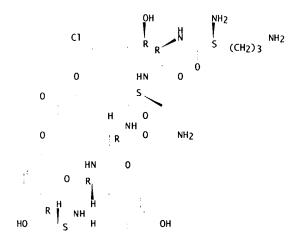
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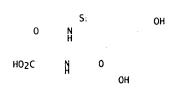
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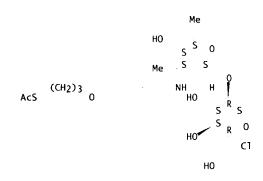
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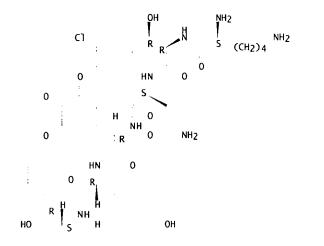
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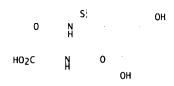
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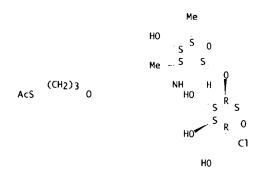
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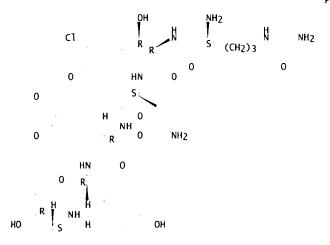
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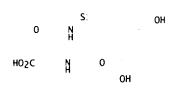
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Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]-54[(aminocarbonyl)amino]-26-[[(carboxymethyl)amino]carbonyl]-26-decarboxy53,56-didemethyl- (9CI) (CA INDEX NAME)



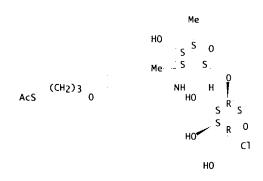
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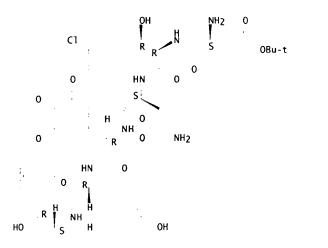
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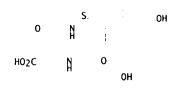
383185-12-4 CAPLUS Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]-49-[(2S)-2-amino-4-(1,1-dimethylethoxy)-1,4-dioxobutyl]-26[[(carboxymethyl)amino]carbonyl]-26-decarboxy-49-de[4-methyl-2-(methylamino)-1-oxopentyl]- (9CI) (CA INDEX NAME) RN CN



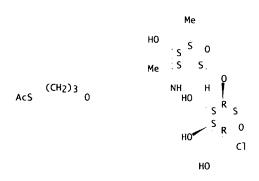
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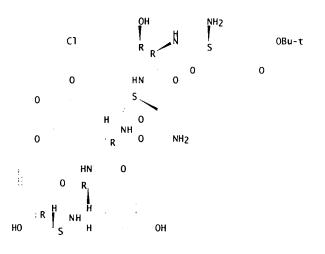
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383185-32-8 CAPLUS Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]-54-(1,1-dimethylethoxy)-26-[[(carboxymethyl)amino]carbonyl]-26-decarboxy-53,56-didemethyl-54-oxo- (9CI) (CA INDEX NAME)



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vancomycin analogues with activity against

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Nicolaou, K. C.; Cho, Suk Young; Hughes, Robert;
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Labischinski, Harald; Endermann, Rainer
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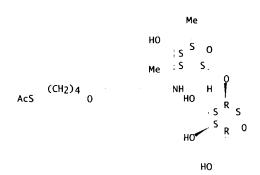
AB Vancomycin, the prototypical member of the glycopeptide family of antibiotics, is a clin. used antibiotic employed against a variety of drug-resistant bacterial strains including methicillin-resistant Staphylococcus aureus (MRSA). The recent emergence of vancomycin resistance, viewed as a growing threat to public health, prompted us to initiate a program aimed at restoring the potency of this important antibiotic through chem. manipulation of the vancomycin structure. We describe the development of synthetic technol. based on the design of a novel selenium safety catch linker, application of this technol. to a solid-phase semisynthesis of vancomycin, and the solid- and soln.-phase synthesis of vancomycin libraries. Biol. evaluation of these compd. libraries led to the identification of a no. of in vitro highly potent antibacterial agents effective against vancomycin-resistant bacteria. In addn. to aiding these investigations, the solid-phase chem. described herein is expected to enhance the power of combinatorial chem. and facilitate chem. biol. and medicinal chem. studies.

IT 383183-30-0 383183-31-1 383183-32-2 383183-33-3 383183-34-4 383183-35-5 383183-36-6 383183-37-7 383183-38-3 383183-39-9 383183-40-2 383183-41-3 383183-45-7 383183-46-8 383183-76-4

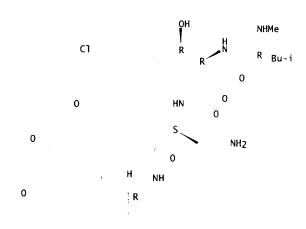
RL: PAC (Pharmacological activity); BIOL (Biological study) (synthesis of vancomycin and vancomycin analogs with activity against vancomycin-resistant bacteria)

RN 383183-30-0 CAPLUS
CN Vancomycin, N3''-[[3-[4-(acetylthio)butoxy]phenyl]methyl]- (9CI) (CA INDEX NAME)

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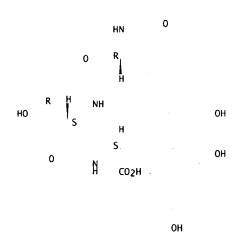


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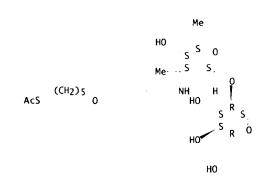


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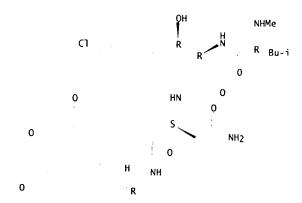
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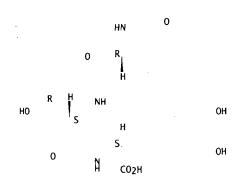
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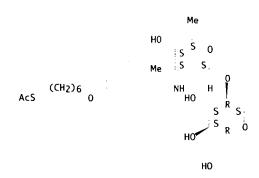
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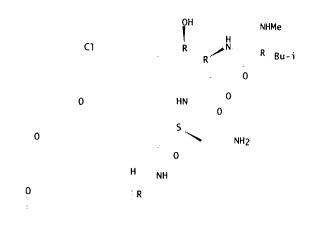
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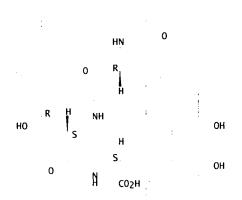


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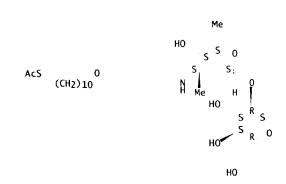
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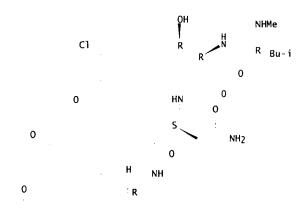


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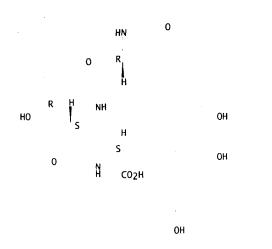


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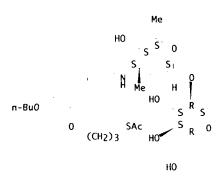
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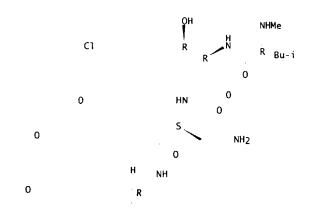


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(CA INDEX NAME)

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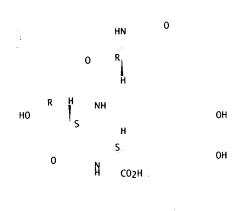


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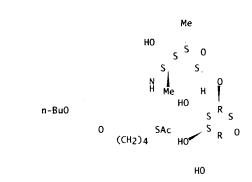
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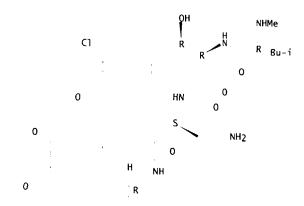


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(CA INDEX NAME)

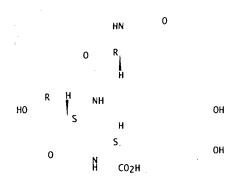
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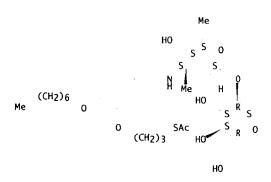


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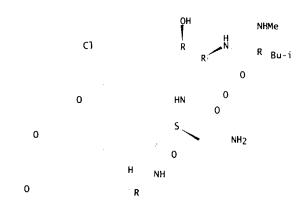
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Absolute stereochemistry.

PAGE 1-A

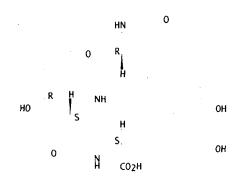


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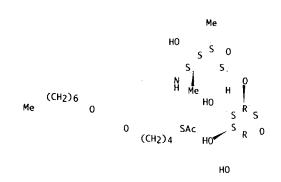
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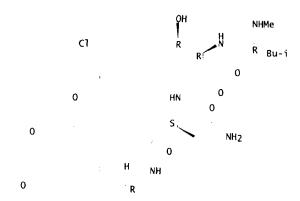


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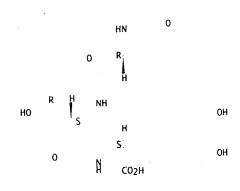
RN 383183-37-7 CAPLUS
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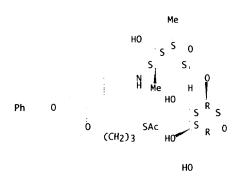


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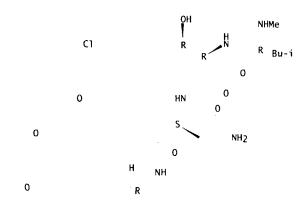
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Absolute stereochemistry.

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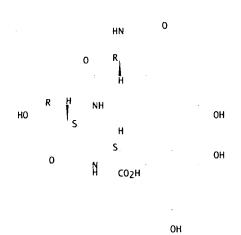


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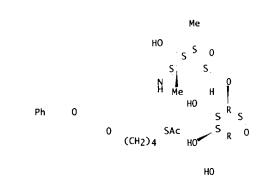


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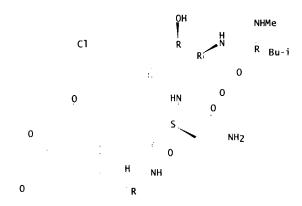
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383183-39-9 CAPLUS Vancomycin, N3''-[[3-[4-(acetylthio)butoxy]-4-(phenylmethoxy)phenyl]methyl]- (9CI) (CA INDEX NAME)

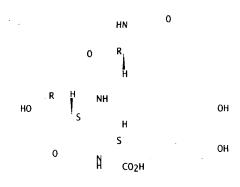


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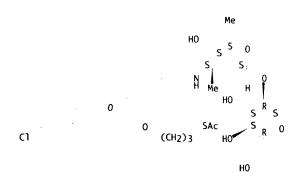


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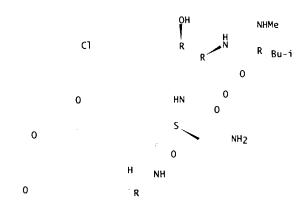
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Absolute stereochemistry.

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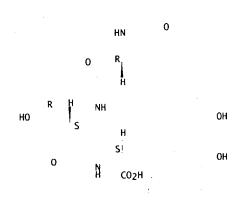


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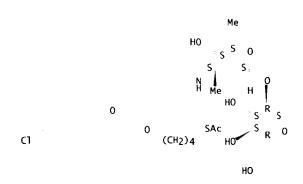
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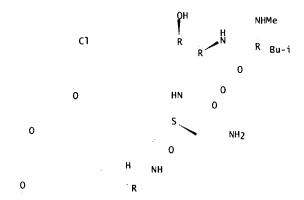


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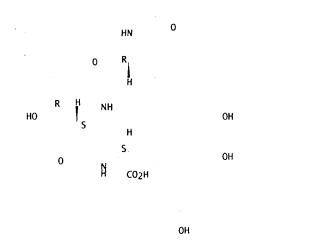


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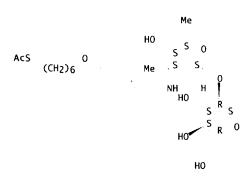
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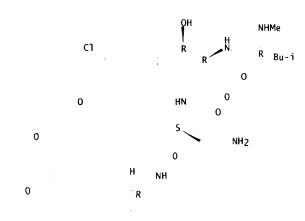
RN 383183-45-7 CAPLUS
CN Vancomycin, N3''-[[4-[[6-(acetylthio)hexyl]oxy]phenyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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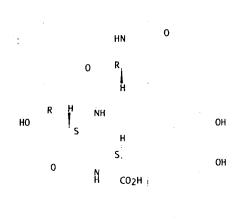


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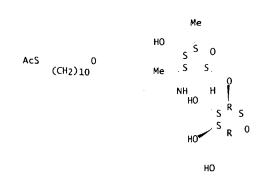
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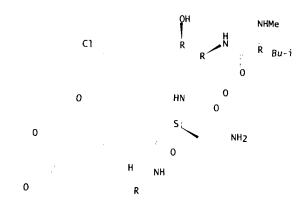


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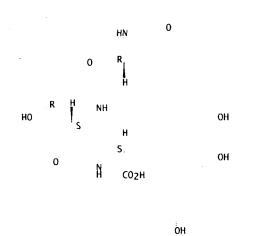
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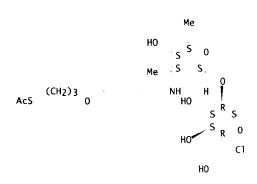
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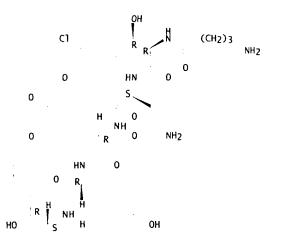
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Absolute stereochemistry.

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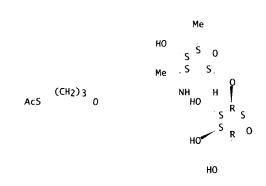
321362-17-8P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of vancomycin and vancomycin analogs with activity against vancomycin-resistant bacteria)

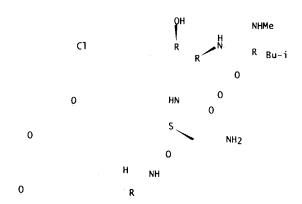
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Absolute stereochemistry.

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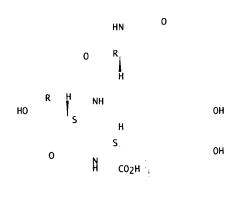
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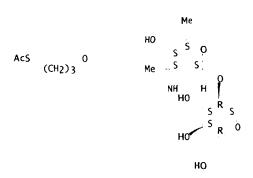
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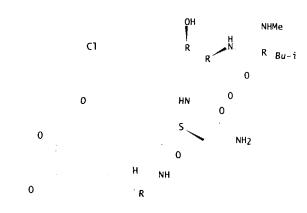
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Absolute stereochemistry.

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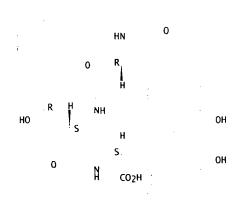


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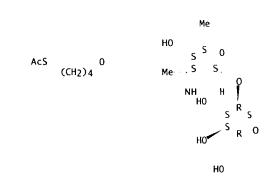
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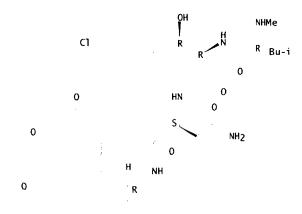


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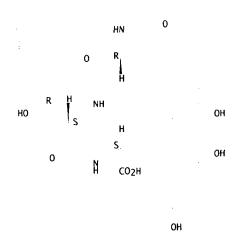
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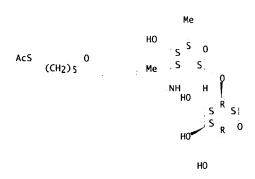
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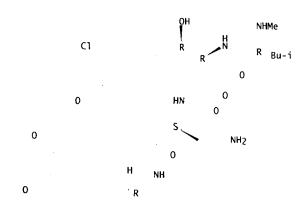
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CN Vancomycin, N3''-[[4-[[5-(acetylthio)pentyl]oxy]phenyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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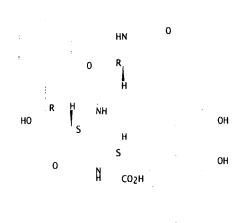


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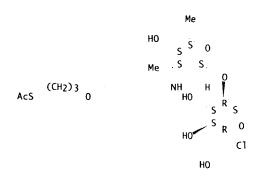
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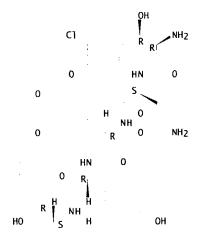


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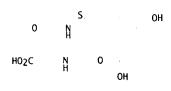
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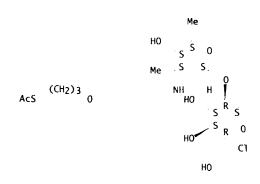
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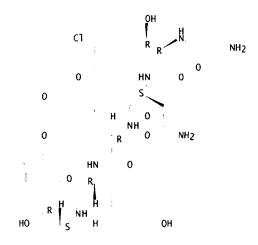
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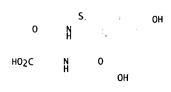
383183-72-0 CAPLUS
Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]-49(aminoacetyl)-28-[[(carboxymethyl)amino]carbonyl]-28-decarboxy-49-de[4methyl-2-(methylamino)-1-oxopentyl]- (9CI) (CA INDEX NAME)



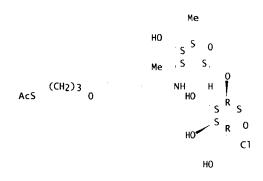
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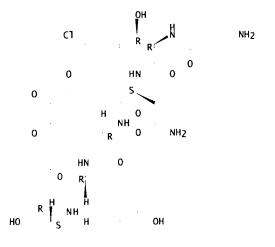
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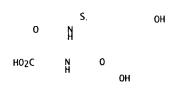
383183-74-2 CAPLUS Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]-49-(3-amino-1-oxopropyl)-28-[[(carboxymethyl)amino]carbonyl]-28-decarboxy-49-de[4-methyl-2-(methylamino)-1-oxopentyl]- (9CI) (CA INDEX NAME)



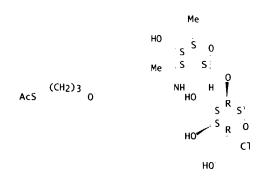
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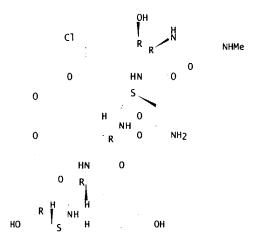
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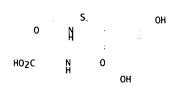
383183-75-3 CAPLUS Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]-28-[[(carboxymethyl)amino]carbonyl]-28-decarboxy-49-de[4-methyl-2-(methylamino)-1-oxopentyl]-49-[(methylamino)acetyl]- (9CI) (CA INDEX NAME)



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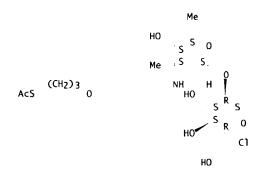


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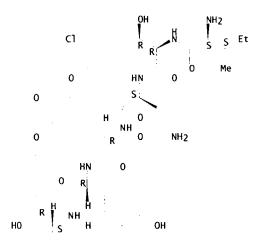


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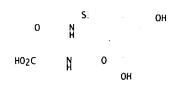
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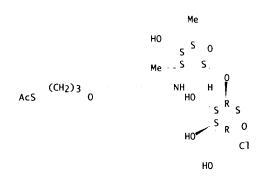
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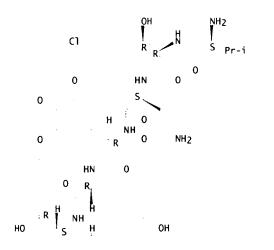
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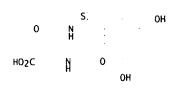
383183-79-7 CAPLUS
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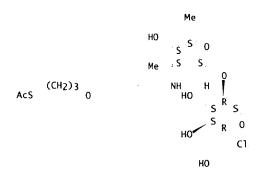


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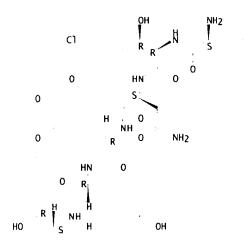


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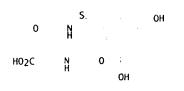
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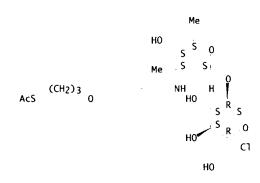
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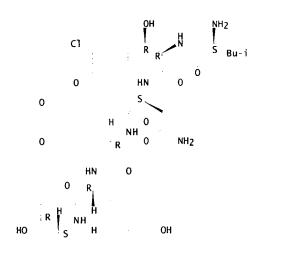
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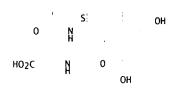
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(CA INDEX NAME)



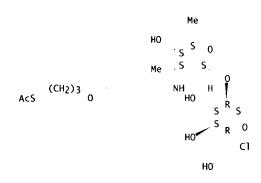
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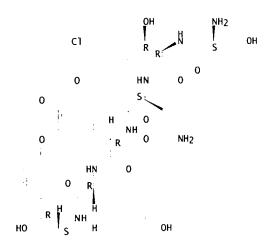
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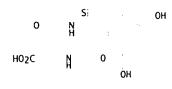
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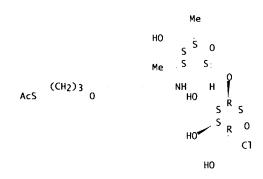
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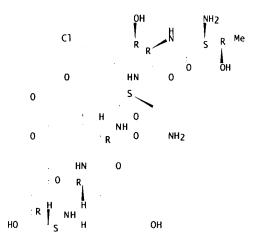
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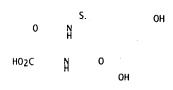
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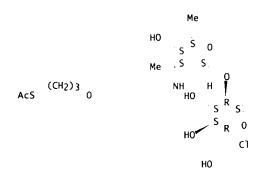


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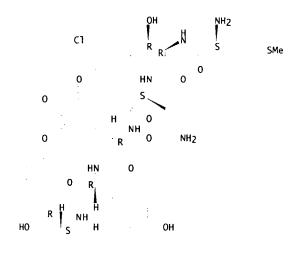


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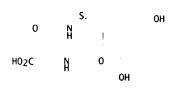
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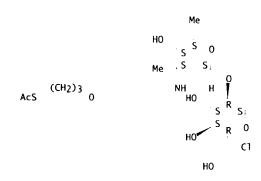
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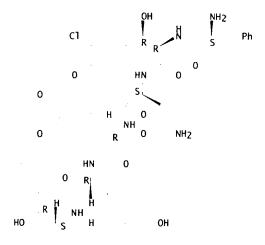
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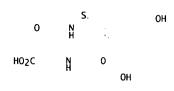
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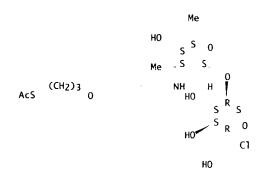
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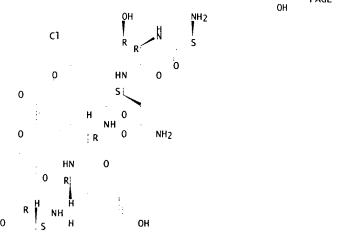
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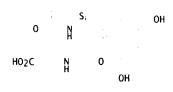
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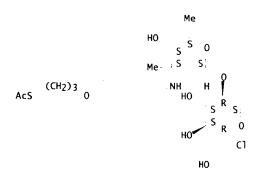


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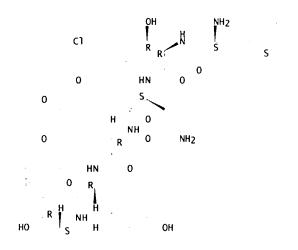


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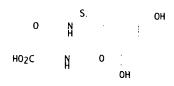
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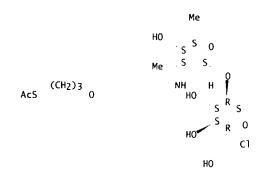
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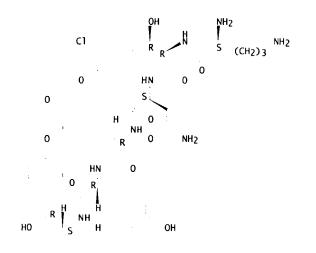
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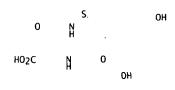
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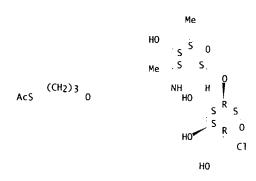
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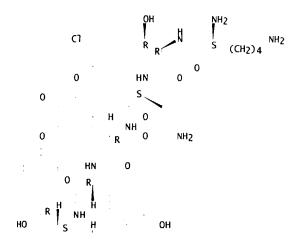
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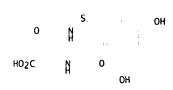
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CN Vancomycin, N3''-[[3-[3- (acetylthio)propoxy]phenyl]methyl]-26[[(carboxymethyl)amino]carbonyl]-26-decarboxy-49-de[4-methyl-2 (methylamino)-1-oxopentyl]-49-[(25)-2,6-diamino-1-oxohexyl]- (9CI) (CA INDEX NAME)



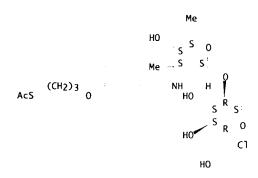
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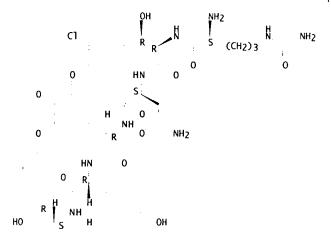
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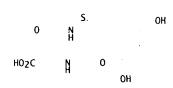
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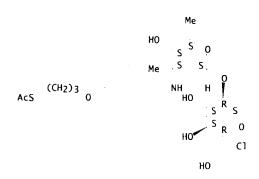
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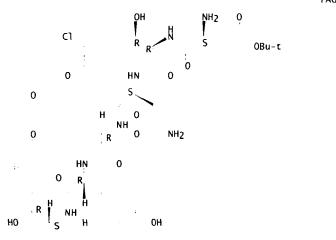
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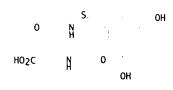
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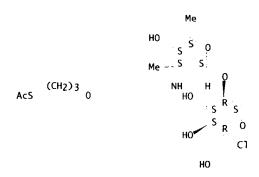


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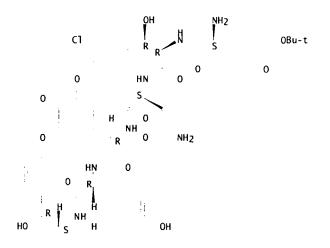


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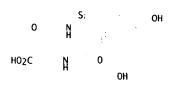
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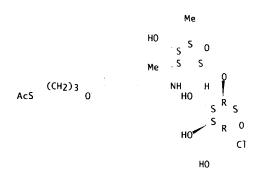
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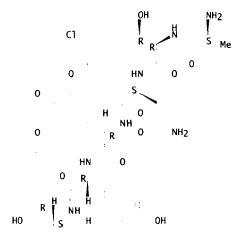
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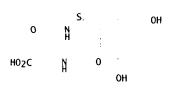
383424-31-5 CAPLUS
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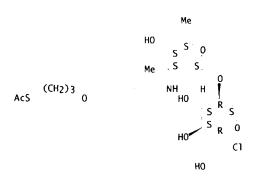
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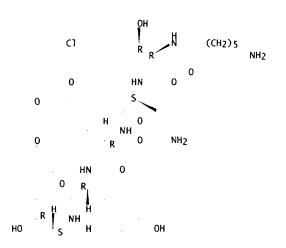
383424-32-6 CAPLUS
Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]-49-(6-amino-1-oxohexyl)-26-[[(carboxymethyl)amino]carbonyl]-26-decarboxy-49-de[4-methyl-2-(methylamino)-1-oxopentyl]- (9CI) (CA INDEX NAME)

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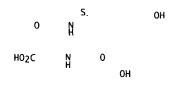
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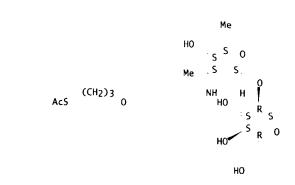
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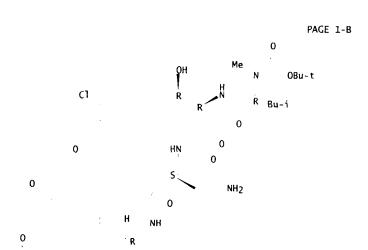


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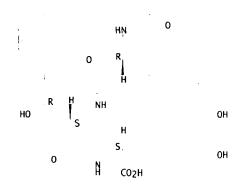
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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (synthesis of vancomycin and vancomycin analogs with activity against vancomycin-resistant bacteria)
383424-29-1 CAPLUS
Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]-56-[(1,1-dimethylethoxy)carbonyl]- (9CI) (CA INDEX NAME)

RN CN





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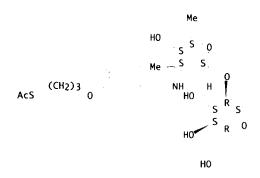
383424-30-4P
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 (synthesis of vancomycin and vancomycin analogs with activity against vancomycin-resistant bacteria)
383424-30-4 CAPLUS
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RN

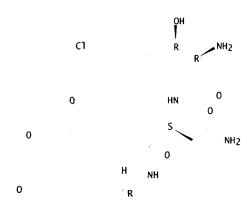
CN

Absolute stereochemistry.

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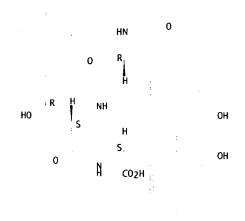


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REFERENCE COUNT: 84 THERE ARE 84 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ACCESSION NUMBER: 2000:818978 CAPLUS

DOCUMENT NUMBER: 134:116215

TITLE: Target-accelerated combinatorial synthesis and

discovery of highly potent antibiotics effective

against vancomycin-resistant bacteria
Nicolaou, K. C.; Hughes, Robert; Cho, Suk Young;
Winssinger, Nicolas; Smethurst, Christian;
Labischinski, Harald; Endermann, Rainer
Skaggs Inst. Chemical Biology, Scripps Res. Inst., La AUTHOR(S):

Jolía, CA, 92037, USA SOURCE:

Angewandte Chemie, International Edition (2000),

39(21), 3823-3828 CODEN: ACIEF5; ISSN: 1433-7851

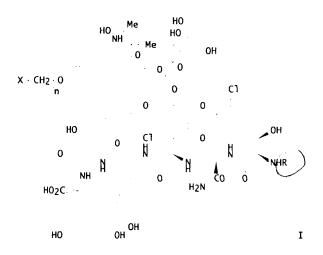
PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal LANGUAGE: English.

CORPORATE SOURCE:

Nov. 3 (2000)

OTHER SOURCE(S): CASREACT 134:116215



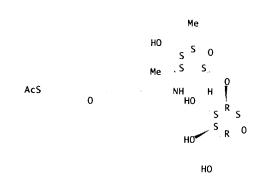
The authors report the application of direct target-accelerated combinatorial synthesis (TACS) of vancomycin dimers for the identification of ligands with the highest affinity for vancomycin's receptor. D-Ala-D-Ala. For example, solid- and soln.-phase combinatorial chem. were used to synthesize a library of vancomycin substrates, from which a set of monomers I $[n=2-4;\ X=SCOMe,\ CH:CH2;\ R=H,\ D-(NMe)Leu,\ .beta.-Ala,$ L-Asn, etc.] were chosen for the target-accelerated dimerization step. (X = SCOMe) was subjected to ligation by disulfide bond formation and I (X = SCOMe)= CH:CH2) was subjected to ligation by olefin metathesis in both the absence and presence of vancomycin's targets, Ac-D-Ala-D-Ala-OH and Ac-Lys(Ac)-D-Ala-D-Ala-OH, for which vancomycin has the greatest affinity. AC-Lys(AC)-D-Ala-D-Ala-OH, for which vancomych has the greatest affinity. Here, a strong target-induced rate acceleration was obsd. in the presence of these targets. Thus, target-accelerated combinatorial synthesis was performed, and from this library, several olefin metathesis dimers of I [n = 2-4; R = H, D-(NMe)Leu, .beta.-Ala, Asn] and disulfide dimers of I [n = 2,3; R = D-(NMe)Leu] were identified, and these were, then, individually synthesized from their resp. monomers. Antibacterial activity for these dimers were reported; of them, some have potent activities against vancomycin-resistant enterococci (VRE) and vancomycin intermediate susceptible Staplhnylococcus arureus (VISA) that rival or exceed the most active compds. known today for these bacterial strains.
321362-15-6P 321362-17-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

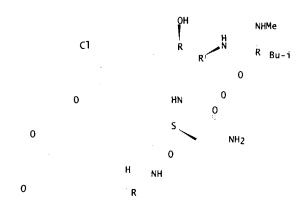
(prepn. of vancomycin substrates for the target-accelerated combinatorial synthesis of vancomycin dimers)

321362-15-6 CAPLUS

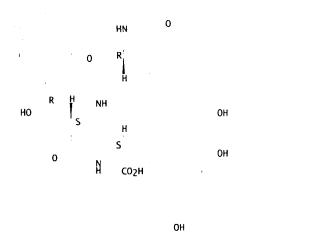
Vancomycin, N3''-[[3-[2-(acetylthio)ethoxy]phenyl]methyl]- (9CI) (CA INDEX NAME)



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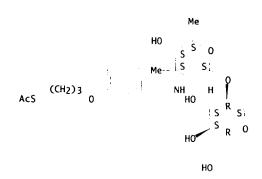
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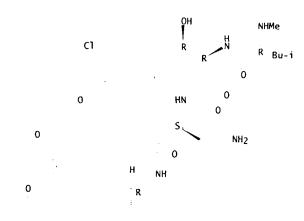
RN 321362-17-8 CAPLUS
CN Vancomycin, N3''-[[3-[3-(acetylthio)propoxy]phenyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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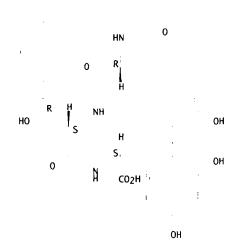


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